In th Claims:
Pending Claims:

Claims 1-3 (Canceled)

4. (Currently Amended) A liquid composition [of claim 3,] prepared by copolymerizing olefinically unsaturated compounds in a reaction medium of reactive diluents wherein the reactive diluents comprise polyols [used comprise compounds] selected from the group consisting of

(i) hyperbranched compounds containing (a) a tetrafunctional central group derived from [compounds selected from the group consisting of] at least one of ditrimethylolpropane, diglycerol, ditrimethylolethane and (b)a tetrafunctional central group

of the general formula I

$$C[-A_q-X-]_m[-A_r-x-]_n[-A_s-X-]_o[A_t-X-]_p \qquad (I),$$

in which the indices and variables have the following definitions:
m + n + o + p = 4; where
m is an integer from 1 to 3, and
n, o and p are 0 or an integer from 1 to 3;
q, r, s and t are an integer from I to 5, where $q \geq r, s, t,$

X is -0-, -S- or -NH-;

A is $-CR_2-$; where

R is selected from the group consisting of -H, -F, -Cl, -Br, -CN, $-NO_2$ C_1-C_3 alkyl or haloalkyl or C_1-C_3 alkoxy radical or, if q, r, s and/or t are at least 2, R is selected from the group consisting of a C_2-C_4 alkanediyl, oxaalkanediyl radical having 2 to 5 carbon atoms, an

oxygen atom -O- which bridges from 3 to 5 carbon atoms of the radical -A- and mixtures thereof;

[(ii) cyclic and/or acyclic C_9-C_{16} alkanes functionalized with at least two hydroxyl groups or at least one hydroxyl group and at least one thiol group;] and

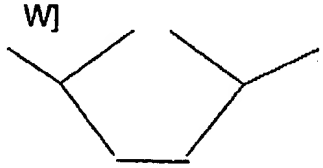
(iii) polyols obtained by hydroformylating oligomers of the formula (III),

$R^3R^4C=[CH-R^2-CH]_v=CR^5R^6$ (III),

in which R^2 is $-(-CH_2-)_w-$,

in which [the index] w is [an integer from 1 to 6, or

= W]



[in which w is $-CH_2-$ or an oxygen atom];

R^3, R^4, R^5 and R^6 independently of one another are hydrogen atoms or alkyl of from C_1 to C_{10} carbon chain length; and

the index v is an integer from 1 to 15.

5. (Withdrawn)

6. (Withdrawn)

Claim 7 (Canceled).

8. (Currently Amended) A process for preparing a liquid composition according to claim 4 [by] comprising polymerizing by free-radical

copolymerization in a liquid reaction medium, which comprises using, as the reaction medium, reactive diluents for thermally curabl multisubstance mixtures.

9. (Previously Amended) The process as claimed in claim 8, wherein a fraction of the reactive diluents is modified after the copolymerization with olefinically unsaturated compounds, so that the resulting liquid composition is curable by means selected from thermal, actinic light, and and electron beams, and mixtures thereof.

Claims 10-11 (Canceled)

12. (Previously Added) A liquid compositon of claim 4, wherein [A.] the polyols (iii) have a hydroxyl number (OHN) of from 250 to 450, a number-average molecular weight M_n, of from 400 to 600, a mass-average molecular weight M_w, in the range from 600 to 1100, and a polydispersity M_n/M_w, from 1.7 to 1.9.

Claims 13-14 (Canceled)

15. (Currently amended) The composition of claim 4 wherein said composition comprises a [A] homopolymer or copolymer. [as claimed in claim 2, wherein compounds selected from the group consisting of polyols, epoxides and mixtures thereof are used as reactive diluents.]

Claims 16-17 (Withdrawn)

18. (Currently Amended) A homopolymer or copolymer of claim 15, wherein [A.] the polyols (iii) used in polymerization of the homopolymer or copolymer have a hydroxyl number (OHN) of from 250 to 450, a number-average molecular weight M_n, of from 400 to 600, a mass-average molecular weight M_w, in the range from 600 to 1100, and a polydispersity M_n/M_w, from 1.7 to 1.9.

19. (Canceled)

20. (Withdrawn)

Claims 21-30(Canceled)

31. (New) A liquid composition prepared by copolymerizing olefinically unsaturated compounds in a reaction medium of reactive diluents wherein the reactive diluents comprise polyols selected from the group consisting of

hyperbranched compounds containing (a) a tetrafunctional central group derived from at least one of ditrimethylolpropane, diglycerol, ditrimethylolethane and (b)a tetrafunctional central group

of the general formula I

$$C[-A_q-X-]_m[-A_r-x-]_n[-A_s-X-]_o[A_t-X-]_p \qquad (I),$$

in which the indices and variables have the following definitions:

m + n + o + p = 4; where

m is an integer from 1 to 3, and

n, o and p are 0 or an integer from 1 to 3;

q, r, s and t are an integer from I to 5, where $q \geq r, s, t,$

X is -0-, -S- or -NH-;

A is $-CR_2-$; where

R is selected from the group consisting of -H, -F, -Cl, -Br, -CN, $-NO_2$ C_1-C_3 alkyl or haloalkyl or C_1-C_3 alkoxy radical or, if q, r, s and/or t are at least 2, R is selected from the group consisting of a C_2-C_4

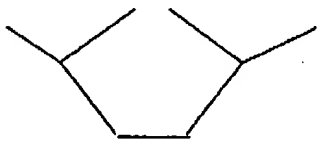
alkanediyl, oxaalkanediyl radical having 2 to 5 carbon atoms, an oxygen atom -O- which bridges from 3 to 5 carbon atoms of the radical -A- and mixtures thereof.

32. (New)

A liquid composition prepared by copolymerizing olefinically unsaturated compounds in a reaction medium of reactive diluents wherein the reactive diluents comprise polyols selected from the group consisting of polyols obtained by hydroformylating oligomers of the formula (III),

$R^3R^4C=[CH-R^2-CH]_v=CR^5R^6$ (III),

in which R^2 is an oxygen atom-,
In which the index w is



R^3, R^4, R^5 and R^6 independently of one another are hydrogen atoms or alkyl; and the index v is an integer from 1 to 15.